

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 02/12/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,146	09/30/1999	HIROYUKI SUZUKI	FUJY-16.562 4974	
7590 02/12/2004			EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE			MEHRA, INDER P	
NEW YORK, NY 10022			ART UNIT	PAPER NUMBER
			2666	

Please find below and/or attached an Office communication concerning this application or proceeding.

		\mathbf{X}				
,	Application No.	Applicant(s)				
	09/409,146	SUZUKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Inder P Mehra	2666				
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPI THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rej - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statul - Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b). Status	.136(a). In no event, however, may a reply be tin ply within the statutory minimum of thirty (30) day I will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1)⊠ Responsive to communication(s) filed on <u>30</u>	September 1999 .					
	his action is non-final.					
3) Since this application is in condition for allow closed in accordance with the practice unde						
Disposition of Claims	,					
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application	on.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-11</u> is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/Application Papers	or election requirement.					
	•					
9) The specification is objected to by the Examin10) The drawing(s) filed on 30 September 1999 is.		to by the Everniner				
Applicant may not request that any objection to t	, , , , , , , , , , , , , , , , , , , ,	•				
11) The proposed drawing correction filed on						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the E	• •					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreig	gn priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:		, , , , ,				
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
Copies of the certified copies of the pri- application from the International B See the attached detailed Office action for a lis	ureau (PCT Rule 17.2(a)).	·				
14) ☐ Acknowledgment is made of a claim for domes	·					
a) The translation of the foreign language pr	rovisional application has been rec	eived.				
Attachment(s)	priority under 00 0.0.0. 33 120	rund/UI I&I.				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
2 Detect - IV 1 1 000						



Art Unit: 2666

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "27" has been used to designate both interface (os/or 27) and "OAM Complex (controller)". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 3. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by **Masuo et al** (US Patent No. 6,034,9610.

Regarding claims 1-3, Masuo discloses, in reference to figs. 2-3, network system (plurality of high-order nodes) including, in fig. 2, nodes 13 and 14 (high-order nodes); and nodes 11 and 18 (low-order nodes); in which data is transmitted from terminal 21 to terminal 22 via low-order nodes 11 and 18 (from one low-order node to another low-order node); wherein

- nodes 13 and 14 (first high-order nodes) and nodes 15 and 16 (second-order nodes);
- nodes 11 and 18 (first low-order nodes) of the first high order nodes;

Nodes 11 and 18 (low order nodes), refer to fig. 1, comprise:



Art Unit: 2666

- signaling means 2 analyzes the contents of received response message (detection section, as also recited by claims 2 and 3,(nodes 13 through 17, including high-order nodes, have the same functions and operate the same way, refer to col. 6 lines 62-65); and determines if message indicates failure, refer to col. 6 lines 24-30;
- upon detection of failure, setting up of stand-by route is executed (a host change request section requesting the second high order-----, as also recited by claims 2 and 3), refer to col. 6 lines 28-31;
- upon detection of failure, the signaling means 2 in node 11 (setting section) transmits failure message to the node 11, starting node, (low-order node), refer to col. 6 lines 48-50, procedure for setting standby route is executed (a low-order node setting section ---transmit data---- in place of first order node------), refer to col. 6 lines 28-31;

the second high-order node comprises:

- standby route calculating means 4 (second high-order node setting section), fig. 1, calculating a standby route (one of the processes for causing the second high order node to transmit data----), refer to col. 6 lines 3-10; note that nodes 13 through 17, including nodes 15 and 16 (standby second high-order nodes), have the same functions and operate the same way, refer to col. 6 lines 62-65;
- standby calculation means 4 calculates a standby route with reference to the topology information table 5, refer to col. 6 lines 8-10, and informs node 11 (first low-order node), refer to col. 6 lines 48-51.



Art Unit: 2666

Regarding claims 4-7, Masuo discloses a network system according to claims 1-3, wherein:

- each node exchanging network topology and route information (path information),
 refer to col. 4 lines 10-22;
- each node exchanges information (each of the low-order nodes receives the path information---); starting node (low-order node) calculates a route up to the end node (path information), performs line connection, refer to col. 4 lines 15-20; and add M sub b (active mode) information to connection pair identifier and exchange network topology information, refer to col. 4 lines 10-20;
- starting node 11 (low-order node) performs the process, refer to col. 7 lines 53-55, of setting an active route to the end node via nodes 12-18 (each of the high order nodes transmits the data –from a low order node to the other low order node----), refer to col. 7 lines 53-56 and col. 8 lines 8-10;

the first low-order node further comprises:

- active route information table 6; topology information table 5; standby routing information table 7; and connection pair table 8, refer to in fig. 1; further discloses storage area for a connection identifier (memory section storing path information----), refer to col. 4 lines 64-65;
- routing means 1 updates the information stored and updating is required according to certain rules, refer to col. 5 lines 14-17; transfer the information to another node when it is required to transfer the topology information to another node, the routing means 1 transmits the received topology information; each node holds information on



Art Unit: 2666

the topology (an updating section for receiving updated path information ----), refer to col. 5 lines 15-22;

- the signaling means 2 executes a procedure for setting up a standby route (setting section of second high order node), including each node (including second order nodes 15 and 16) carries out route calculation (path information) based on topology information (generates updated path information as a new path), refer to col. 2 line 62-67;
- standby calculation means 4 (process information transfer section of the second highorder) calculates a standby route with reference to the topology information table 5 (updated path), refer to col. 6 lines 8-10, and informs node 11 (transmits to first loworder node), refer to col. 6 lines 48-51.

Regarding claims 8-11, Masuo discloses, in reference to figs. 2-3, network system (plurality of high-order nodes) including, in fig. 2, nodes 13 and 14 (high-order nodes); and nodes 11 and 18 (low-order nodes); in which data is transmitted from terminal 21 to terminal 22 via low-order nodes 11 and 18 (from one low-order node to another low-order node); wherein:

further, discloses starting node 11 (low-order node) performs the process, refer to col. 7



Art Unit: 2666

lines 53-55, of setting an active route to the end node via nodes 12-18 (each of the high order nodes transmits the data –from a low order node to the other low order node----), refer to col. 7 lines 53-56 and col. 8 lines 8-10;

signaling means 2 analyzes the contents of received response message (detection section, as also recited by claims 2 and 3, (note that nodes 13 through 17, including high-order nodes, have the same functions and operate the same way, refer to col. 6 lines 62-65); and determines if message indicates failure, refer to col. 6 lines 24-30;

upon detection of failure, setting up of stand-by route is executed (a host change request section requesting the second high order-----, as also recited by claims 2 and 3), refer to col. 6 lines 28-31;

- upon detection of failure, setting up of stand-by route is executed (request section requesting the second high order-----, as also recited by claims 2 and 3), refer to col.
 6 lines 28-31;
- upon detection of failure, the signaling means 2 in node 11 (setting section) transmits failure message to the node 11, starting node, (low-order node), refer to col. 6 lines 48-50, procedure for setting standby route is executed (a low-order node setting section ---transmit data---- in place of first order node-----), refer to col. 6 lines 28-31;
- active route information table 6; topology information table 5; standby routing information table 7; and connection pair table 8, refer to in fig. 1; further discloses storage area for a connection identifier (memory section storing path information-----), refer to col. 4 lines 64-65;



Art Unit: 2666

routing means 1 updates the information stored and updating is required according to certain rules, refer to col. 5 lines 14-17; transfer the information to another node when it is required to transfer the topology information to another node, the routing means 1 transmits the received topology information; each node holds information on the topology (an updating section for receiving updated path information ----), refer to col. 5 lines 15-22;

Prior Art

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Hiscock et al (US Patent No. 6,347,073) discloses method and system for controlling data transfer between a logical switch set and outside nodes.
 - Blanc et al (US Patent No. 6,411,599) discloses fault tolerant switching architecture

Conclusion

5. Any enquiry concerning this communication should be directed to Inder Mehra whose telephone number is (703) 305-1985. The examiner can be normally reached on Monday through Friday from 8:30AM to 5:00 PM.

If attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Seema Rao, can be reached on (703) 308-5463. Any enquiry of a general nature of relating to the status of this application or processing should be directed to the group receptionist whose telephone number is (703) 305-4700.



Art Unit: 2666

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to (703) 872-9314.

Hand -delivered responses should be brought to Crystal Park II, 2121 Crystal drive,

Arlington, VA, sixth floor (Receptionist).

Inder Mehra Inder Mehra 12/13/02

December 13, 2002

MELVIN MARCELO PRIMARY EXAMINER